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### (54) CATALYST FOR SYNTHESIS OF METHANOL

(57) Abstract:

**PURPOSE:** To provide a catalyst for synthesis of methanol having high activity even under low pressure by using zirconium oxide and cerium oxide as main constituting components.

**CONSTITUTION:** The precipitate obtd. by causing reaction of solns. of salts of Zr and Ce in the presence of a precipitating agent is calcined or a salt of Ce is deposited on ZrO<sub>2</sub> and is heated and decomposed in air, whereby a catalyst consisting of ZrO<sub>2</sub> and CeO having 0.1W30wt% ratio in CeO/(ZrO<sub>2</sub>+CeO<sub>2</sub>) is obtd. Prior to synthesis of methanol from gaseous mixtures of CO/H<sub>2</sub>, or from such gaseous raw materials mixed further with inert gases such as N<sub>2</sub> and Ar, small amts. of gaseous CO<sub>2</sub> and CH<sub>4</sub> by using such catalyst, the catalyst is treated by heating in an atmosphere free from the atmospheric air, whereby the catalytic activity is improved. Said

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